

CD105/Endoglin, soluble Active Protein | CD105/Endoglin active protein

Mouse CD105/Endoglin, soluble

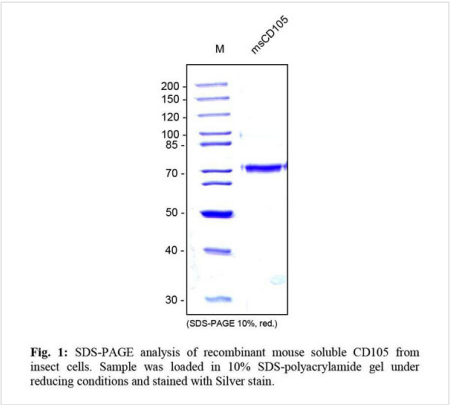
CATALOG # AAA79282	HOST Insect Cells	REACTIVITY Mouse
------------------------------	-----------------------------	----------------------------

PRODUCT SYNONYMS

CD105/Endoglin; soluble; Mouse CD105/Endoglin; Recombinant Mouse Soluble CD105/Endoglin; Cell surface MJ7/18 antigen; CD105; Endoglin; CD105/Endoglin active protein

PRODUCT SPECIFICATIONS

Host	Insect Cells
Reactivity	Mouse
Purity/Purification	> 90% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	ERVGCDLQPV DPTRGEVTF T SQVSEGCVA QAANAVREHV VLFLDFPGML SHLELTQAS KQNGTETQEV FLVLVSNKNV FVKFQAPEIP LHLAYDSSLV IFQGQPRVNI TVLPSLTSRK QILDWAATKG AITSIAALDD PQSIVLQLGQ DPKAPFLCLP EAHKDMGATL EWQPRAQTPV QSCRLEGVSG HKEAYILRIL PGSEAGPRTV TVMMELSCTS GDAILLHGP PYVSWFIDIN HSMQILTTGE YSVKIFPGSK DKGVELPDTP QGLIAEARKL NASIVTSFVE LPLVSNVSLR ASSCGGVFQT TPAPVVTTPP KDTCSPELLM SLIQPKCGNQ VMTLALNKKH VQTLQCTITG LTFWDSSCQA EDTDDHLVLS SAYSSCGMKV TAHVVSNEVI ISFPSGSPPL RKKVQCIDMD SLSFQLGLYL SPHFLQASNT IELGQQAQVQ VSVSPLTSEV TVQLDSCHLD LGPEGDMVEL IQSRTAKGSC VTLLSPSPEG DPRFSFLLRV YMVPTPTAGT LSCNLALRPS TLSQEVYKTV SMRLNIVSPD LSHHHHHH
Sequence Length	558
Gene	Egn
Stabilizer	None
Reconstitution	The lyophilized sCD105 is soluble in water and most aqueous buffers. The lyophilized sCD105 should be reconstituted in PBS or medium to a concentration not lower than 50ug/ml.
Buffer	PBS
Biological Activity	Not tested so far
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C. Reconstituted sCD105 should be stored in working aliquots at -20 degree C.



Application Data

ADDITIONAL INFORMATION

Related Product Information for CD105/Endoglin active protein	A DNA sequence encoding the extracellular domain of mouse Endoglin (Met 1 - Gly 581) was expressed in insect cells. Mouse Endoglin is a disulfide-linked homodimeric protein. Based on N-terminal sequence analysis, the primary structure of recombinant mature Endoglin starts at Glu 26. Endoglin has a calculated monomeric molecular mass of 61 kDa but as a result of glycosylation, migrates at approximately 75 - 85 kDa under reducing conditions in SDS-PAGE. Endoglin, also known as CD105, is a Type I integral membrane glycoprotein with a large, disulfide-linked, extracellular region and a short, constitutively phosphorylated, cytoplasmic tail. Two splice variants of human endoglin, the S-endoglin and L-endoglin that differ in the length of their cytoplasmic tails have been identified. Endoglin is highly expressed on vascular endothelial cells, chondrocytes, and syncytiotrophoblasts of term placenta. It is also found on activated monocytes, bone marrow pro-erythroblasts, and leukemic cells of lymphoid and myeloid lineages. Human and mouse endoglin share approximately 70% and 97 % amino acid sequence identity in their extracellular and intracellular domains, respectively. In common with betaglycan (also named TbetaRIII), a proteoglycan that shares regions of sequence similarity, endoglin is an accessory receptor for the TGF-β superfamily ligands. Endoglin does not bind ligands by itself, but does so by associating with a ligand-binding serine/threonine kinase receptor. Endoglin binds TGF-β1 and TGF-β3 but not TGF-β2 efficiently by associating with TGF-β type II receptor (TbetaRII). It interacts with activin-A and BMP-7 using either the activin type II or type IIB receptors. In the case of BMP-2 which binds directly to the type I but not the type II BMP receptor, endoglin binds via either BMPR-IA (ALK-3) or BMPR-1B (ALK-6). Although the consequence of endoglin interactions on the functions of TGF-β family ligands is poorly understood, endoglin has clearly been shown to be required for angiogenesis and to play a key role in heart development. Mutations in human endoglin or ALK-1 (another type I serine/threonine receptor) lead to the vascular disorder hereditary hemorrhagic telangiectasia (HHT). Mice heterozygous for endoglin have been developed as disease models for HHT. Endoglin has been shown to be a powerful marker of neovascularization. It is also useful as a functional marker that defines long-term repopulating hematopoietic stem cells.
Product Categories/Family for CD105/Endoglin active protein	Soluble receptors
References	1. Cheifetz et al., J Biol Chem 267:19027, 1992 2. Parker et al., J Bone Miner Res 18:289, 2003 3. Barbara et al., J Biol Chem 274:584, 1999 4. McAllister et al., Nature Genet 8:345, 1994 5. Chen et al., Proc Natl Acad Sci 99:15468, 2002

NCBI AND UNIPROT INFORMATION

NCBI GI #	226437647
NCBI GeneID	13805
NCBI Accession #	NP_031958.2
NCBI GenBank Nucleotide #	NM_007932.2
UniProt Accession #	Q63961 ; Q61520 ; Q8K100
Molecular Weight	70-75 kDa

NCBI Official Full Name	endoglin isoform 1
NCBI Official Synonym Full Names	endoglin
NCBI Official Symbol	Eng
NCBI Official Synonym Symbols	Endo; CD105; AI528660; AI662476; S-endoglin
NCBI Protein Information	endoglin; transmembrane glycoprotein; cell surface MJ7/18 antigen
UniProt Protein Name	Endoglin
UniProt Gene Name	Eng
UniProt Synonym Gene Names	Edg
UniProt Entry Name	EGLN_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/insect-cells-mouse-active-protein/cd105-endoglin-soluble/79282>